



Atty. Dkt. No. 045413-0110

AF 1639  
JFW

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Jonathan A. ELLMAN et al.  
Title: PHARMACOPHORE RECOMBINATION FOR THE  
IDENTIFICATION OF SMALL MOLECULE DRUG LEAD  
COMPOUNDS  
Appl. No.: 10/029,304  
Filing Date: 12/28/2001  
Examiner: Jon D. Epperson  
Art Unit: 1639

**AMENDMENT & REMARKS UNDER 37 CFR § 1.116**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

This document is responsive to the final Office Action dated October 20, 2005.

**Amendments to the Claims** are reflected in the listing of claims that begins on page 3 of this document.

**Remarks** begin on page 7 of this document.

An **Appendix** with the following documents is attached hereto following page 15 of this response:

- (Exhibit 1) 132 Declaration by Dr. Clinton A. Kruger
- (Exhibit 2) Dolle, Roland E., Comprehensive Survey of Combinatorial Library Synthesis: 1999, J. of Comb. Chem., Vol 2. No. 5 pp 383-432. (2000).
- (Exhibit 3) Website of Dr. Steven Car, Memorial University of Newfoundland.

[http://www.mun.ca/biology/scarr/2250\\_Proteins.html](http://www.mun.ca/biology/scarr/2250_Proteins.html). 6 pages.

(Exhibit 4) Stryer, Lubert. Biochemistry, Third Edition. pp. 165-166 (1988).

(Exhibit 5) Lazar, Eliane, et al., Transforming Growth Factor  $\alpha$ : Mutation of Aspartic Acid 47 and Leucine 48 Results in Different Biological Activities, Molecular and Cellular Biology, pp. 1247-1252 (1988).

(Exhibit 6) Delvin, John P., High Throughput Screening The Discovery of Bioactive Substances. ARRT International. pp. 17-19. (1997).

(Exhibit 7) Terret, Nicholas K., Combinatorial Chemistry, Oxford University, pp 16. (1998).

(Exhibit 8) Patani, George A. and LaVoie, Edmond J., Bioisoterism: A Rational Approach in Drug Design. Chem. Rev. 96 pp. 3147-3176 (1996).

(Exhibit 9) Friedman, Harris L., Influence of Isosteric Replacements Upon Biological Activity, Nat. Acad. Sci. Nat. Res. Council Publ. No. 206, pp. 296-358 (1951).